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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
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19/013-715 04.30/99 POWELL

0039021-0040  
EXAMINER

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HN12/1017

PATARTUNITED PAPER NUMBER

1652  
DATE MAILED:

10/17/00

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

### OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 9/9/00

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

- ☒ Claim(s) 26-34, 36, 37, 39, 40, 42, 43, 45, 46, 48 & 49 is/are pending in the application.  
Of the above, claim(s) 26-34, 37, 40, 43, 46, 48 is/are withdrawn from consideration.  
☐ Claim(s) \_\_\_\_\_ is/are allowed.  
☒ Claim(s) 36, 40, 43, 45 & 48 is/are rejected.  
☐ Claim(s) \_\_\_\_\_ is/are objected to.  
☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.  
☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.  
☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.  
☐ The specification is objected to by the Examiner.  
☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  
☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.  
☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_  
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

- ☐ Notice of Reference Cited, PTO-892  
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_  
☐ Interview Summary, PTO-413  
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948  
☐ Notice of Informal Patent Application, PTO-152

—SEE OFFICE ACTION ON THE FOLLOWING PAGES—

Applicant's election with traverse of Group III, claims 36, 39, 42, 45 and 48 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that "the Group III claims relate to catalytic antibodies against Group I haptens/immunogens and methods of their preparation ...[and] the haptens/immunogens of Group I contribute automatically to the subject matter of the claims of Group III". Also, a complete novelty search of the invention of Group III would require a search of the invention of Group I and therefore searching for both groups would not impose additional hardship on the examiner. Finally, a search of Groups III and IV, both classified in Class 435, subclass 188.5, is coextensive and would not be a serious burden. This is not found persuasive because the haptens of Groups I and II are chemical compounds that are recognized as separate and distinct from the catalytic antibodies of Groups III and IV. They are completely different compounds with different uses. It is maintained that it would be a serious burden to examine both types of claims and that the catalytic antibodies of Group III are separate and distinct from those of Group IV, raised against different haptens. The election of species was supposedly made with traverse but no reason is given for the traverse and therefore it is treated as an election without traverse. Claims 36, 39, 42, 45 and 48 will be examined for the species indicated in Paper 7.

The requirement is still deemed proper and is therefore made FINAL.

Claims 26-34 and 37, 40, 43, 46 and 49 are withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention, the requirement having been traversed in Paper No. 7.

Claims 36, 39, 42, 45 and 48 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 36, 39, 42, 45 and 48 are confusing in that they depend from claim 26, which claim was not elected for prosecution. As claim 26 will undoubtedly be incorporated into the instant claims it is commented upon here.

Claim 26 is indefinite and confusing in the recitation of "boron-containing of formula I" on line 1. Apparently "happen" or some similar term should be inserted after "containing". The claim is also confusing and indefinite in the recitation of " $R_1$ ...a primary amino containing..." on lines 4-7. Apparently these three choices are meant to be alternatively and should be expressed as a proper Markush group with "and" between the last two members or else with an "or" between the last two members.

The claim is also confusing and indefinite in the recitation of "X is hydrogen...and...and phenylsulfonyl" on lines 12-17. The first "and" is apparently meant to be between the last two members of the Markush group starting on line 12, however the last "and" is confusing as there is not another Markush group on the indicated lines. Apparently the last "and" should be "or".

The claim is confusing in the recitation on line 21 of "carbonyl bonded the". Apparently "to" should be inserted after "bonded".

Lines 22-23 do not make any sense in the recitation of "naturally occurring...peptide bond". The examiner cannot determine what was intended here.

The recitation of "or" on line 24 is not understood and apparently should be eliminated.

Finally the claim is confusing in the recitation on lines 31-32 of "if q is 2, then there is no bond between X and the carbon bond of Z". There is no such bond indicated in the formula at the beginning of the claim as X and Z are not connected.

Claim 42 is incorrect and inconsistent with claim 39 in the recitation of "in vitro or in vivo" on line 2. Apparently the correct recitation is "in vitro or in vivo" as in claim 39.

In applicants' preliminary amendment filed 4/3/99 they have instructed that the first two applications in the priority (08/333,237 and 07/190,271) be inserted before the first line of the specification. The next two application in the lineage of the priority are now in the second paragraph of the specification. These two recitation need to be included together in the first paragraph of the specification.

Claims 36, 39, 42, 45 and 48 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 26, upon which the instant claims depend, has changed "hydroxy" to "hydroxyl" and "amido" to "amino" with no explanation or discussion as to why these changes were made. The specification, for example on pages 22-23, contain the former recitations. If in fact

the former recitations in the specification and claims were chemically incorrect then an explanation of this should be given and the recitation should also be changed in all applicable places. Otherwise this is new matter and the claim should be changed.

Claims 36, 39, 42, 45 and 48 are directed to catalytic antibodies elicited by the hapten of claim 26 (I), a method of making the catalytic antibodies and a method of catalyzing the cleavage of a peptide linkage or an ester bond by using the catalytic antibody. The specification teaches how to make the hapten but does not teach that this hapten can be used to make catalytic antibodies or that these catalytic antibodies can be used to cleave the bonds listed in the claims. One of ordinary skill in the art would have little doubt that structure I could be bound to a protein carrier and used to make antibodies but this ordinary artisan would not know that these antibodies would be catalytic. A particular hapten must be used to make catalytic antibodies and there is no ready way to predict which antibodies to which haptens will be catalytic and which will not. There is apparently not a teaching that any of the embodiments of the hapten of claim 26 have been used to make an antibody that is catalytic. Absent such a teaching it is maintained that the instant claims do not meet the 35 U.S.C. § 112, first paragraph requirement of a written description. One of ordinary skill in the art would not recognize that applicants were in possession of the claimed catalytic antibodies.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles L. Patterson, Jr., Ph.D. whose telephone number is (703) 308-1834. The examiner can normally be reached on any day of the week from 7:30 AM until 4:00 pm.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy, can be reached on (703) 308-3804. The fax phone number for this Group is (703) 305-7401.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Patterson  
October 10, 2000

  
CHARLES L. PATTERSON, JR.  
PRIMARY EXAMINER  
GROUP 1800